

Application No.: 10/823,404

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Remarks/Arguments

This Reply is in response to the Notice mailed on June 09, 2006. Claims 1-43 have been canceled, therefore rendered all rejections moot. Newly presented claims 44-54 are from copending application nos. 10/659,090. No new issues are submitted by this amendment. A confirmation on the unique characteristic of the manufactured copper ingot from the third party companies can be found in the Declaration filed under 37 CFR 1.132, which was submitted in the June 2, 2006 amendment. The errors in the specification have been corrected by the amendment set forth above.

No new matter is added by virtue of these amendments.

Obviousness Type Double Patenting

All claims have been provisionally rejected under the doctrine of obviousness-type double patenting over US patent No. 6,572,792 and 6,921,497. The Applicant filed a terminal disclaimer to both patents cited on May 30, 2006, signed by the undersigned, stated to be an attorney of record. Certain overlapping claims were presented in USSN 10/659,090. Upon an indication of otherwise allowable subject matter, an additional disclaimer will be presented.

Rejection Under 35 U.S.C. §112, First Paragraph

The Examiner rejected claims 51-54 in USSN 10/659,090 stating that the limitations recited in each of these claims do not find literal or inherent support in the disclosure as originally filed. Applicant disagrees. The Examiner does not dispute that the specification teaches copper compositions produced by an iterative process which is characterized by the physical properties described in the claim. Thus, albeit the words of the claim are not quoted from the specification, the specification certainly supports the subject matter being claimed in such a way as to teach one of ordinary skill in the art that Dr. Nagel was in possession of the invention at the time the application was filed. Withdrawal of the rejection is requested.

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Rejection Under 35 U.S.C. §112, First Paragraph, Enablement

The Examiner further rejected claims 44-54 stating that of the five examples directed to the "tailored" copper, only two exhibit any type of magnetic activity and therefore a skilled artisan would be unable to produce the claimed magnetic copper compositions without undue experimentation. The Applicant respectfully disagrees. While it is true that two examples reported in the specification exhibit substantial magnetic property, two had minimal or reduced activity as compared to the others (page 69, line 15 and page 72, lines 4-5). Further, the negative result of the remaining example (Example 1) does not prove the absence of magnetic property. In *In re Wands*, it was found by the court that the enablement was met even though only four out of the nine examples showed the desired properties. Thus, the fact that the magnetic properties were not observed each time the process was repeated does not support the conclusion that the person of ordinary skill in the art would not be enabled to make such a product given the teachings of the reference. *In re Wands*, 858 F.2d 731, 8 USPQ2d 1400 (Fed. Cir 1988). Applicant respectfully requests that the rejection be withdrawn.

Rejection Under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 44-49, 51, 52 and 54 as being indefinite for failing to particularly point out and distinctly claim the subject matter. The Examiner states that the terms "substantially free of other metals", "substantially no difference in Gauss readings", and "essentially zero" in claims 44-49, 51, 52 and 54 are relative terms, which render the claim indefinite. The Applicant respectfully disagrees. The terms "substantially" and "essentially" are used extensively in patents and are to be interpreted within the context of the specification and examples. For example, the phrase "a silicon dioxide source that is essentially free of alkali metal" was held to be definite because the specification contained guidelines and examples that were considered sufficient to enable a person of ordinary skill in the art to draw a line between unavoidable impurities in starting materials and essential ingredients. *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (CCPA 1983). The examples in the present application clearly set forth the purity for

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each starting material and that the material is not in contact with impurities or other metals. Example 1 clearly states the use of copper with 99.98% purity (page 30, line 7). Applicant respectfully asserts that the present specification provides sufficient guidance and exemplification to particularly point out and distinctly claim the subject matter, in spite of the use of relative words.

Rejection Under 35 U.S.C. §102(b)

The Examiner rejected claims 44-54 (from application no. 10/659,090) as being anticipated by either Svensson et al (Magnetic and electrical properties of copper-iron.), Dovgopol et al (Magnetic thermodynamic, and kinetic properties of copper containing 0.4-2.0 atom% iron impurities), or Campbell et al (A Moessbauer study of the magnetic properties of copper-iron (CuFe) alloys). Applicant respectfully disagrees. Svensson discloses Cu-Fe alloys containing 0.2-1.7 atom% (2,000-17,000 ppm) Fe. Dovgopol discloses Cu-Fe alloys containing 0.4-2.0 atom% (4,000-20,000 ppm) Fe. Campbell discloses Cu-Fe alloys containing 0.24-4.6 atom% (2,400-46,000 ppm) Fe. The amount of iron present in these metals is said to be responsible for the magnetism. Thus, one of skill in the art would not conclude that this material is "substantially free" of Fe. The XRF data in the application and the GDMS, XRF, PIXE and GDOES analyses from the third parties, all detected the Fe signature of less than 472 ppm. The presence of Fe reported in analyses does not provide the basis to conclude that Fe is present in the manufactured copper ingot because the copper ingot was never in contact with such element. Reiterating the presently claimed invention, the manufactured copper ingot is the same starting copper material (e.g. 99.98% in purity), but exhibits different electronic state scan in the GDMS, XRF, PIXE and GDOES analyses from its original precursor. It is believed that the cited prior art does not anticipate the present claims. Applicant respectfully requests that the rejection under 35 U.S.C. §102(b) be withdrawn.

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**Conclusion**

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 251-3509.

Respectfully submitted,

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Dated: November 7, 2006